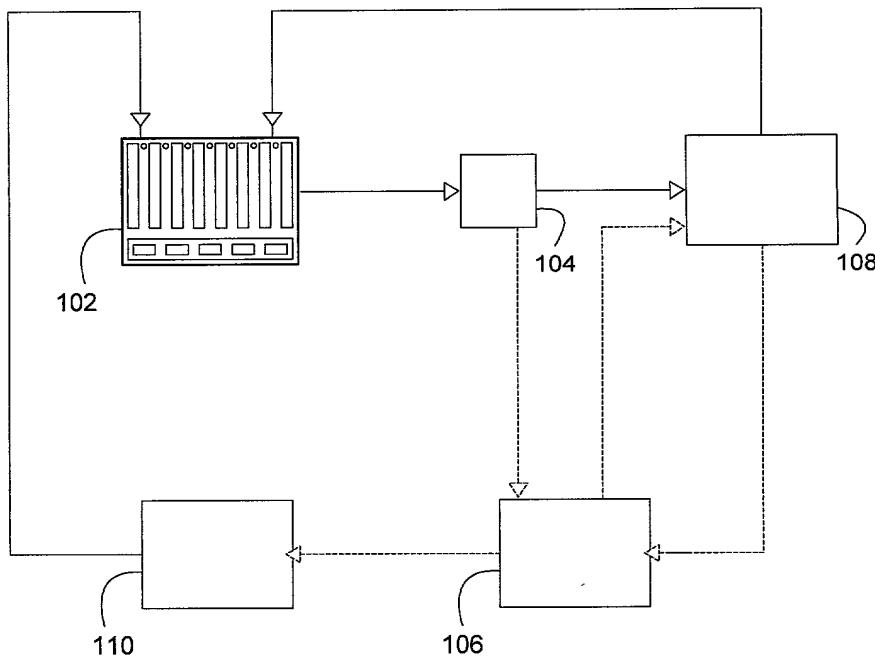
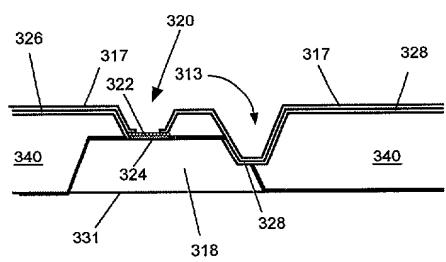


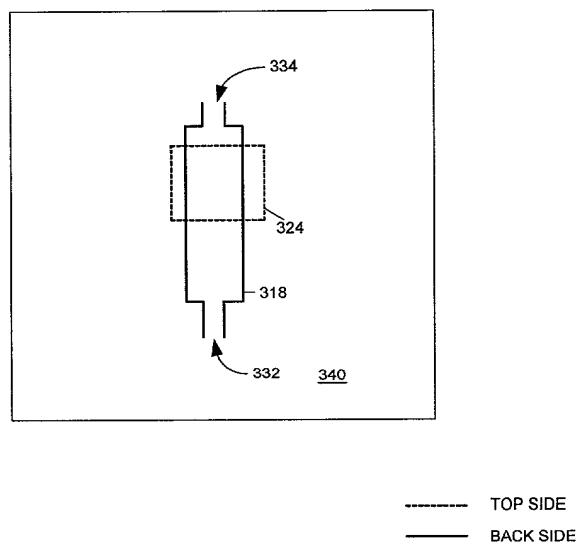
**FIGURE 1**



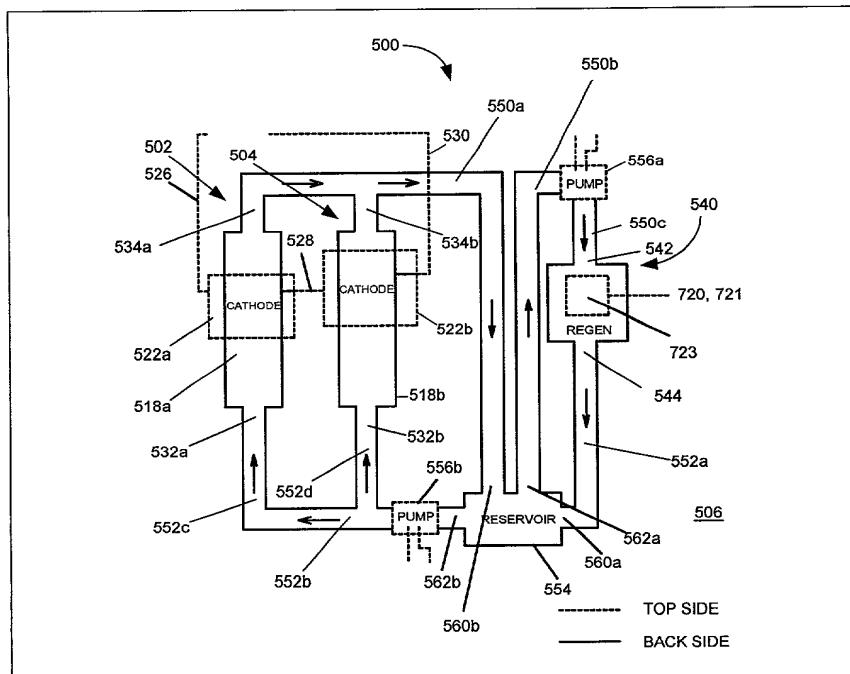
**FIGURE 2**



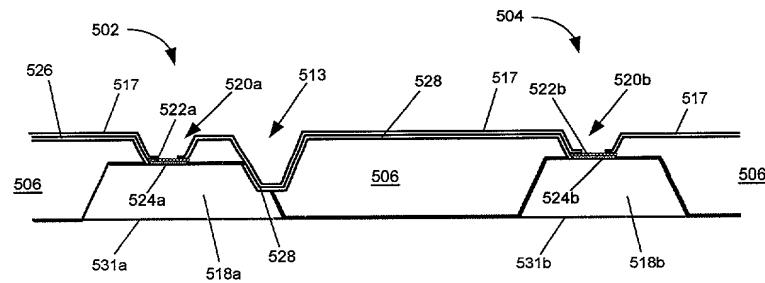
**FIGURE 3**



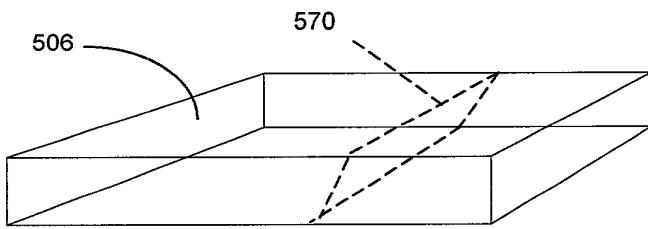
**FIGURE 4**



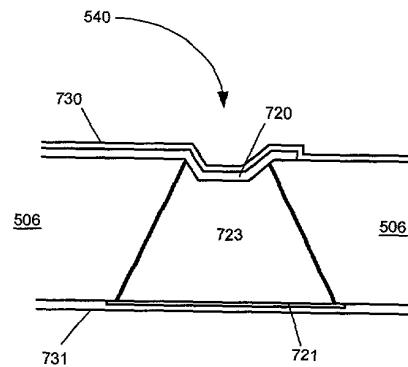
**FIGURE 5**



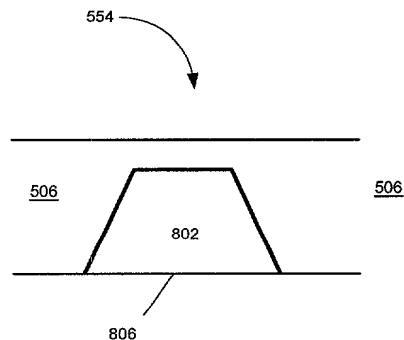
**FIGURE 6A**



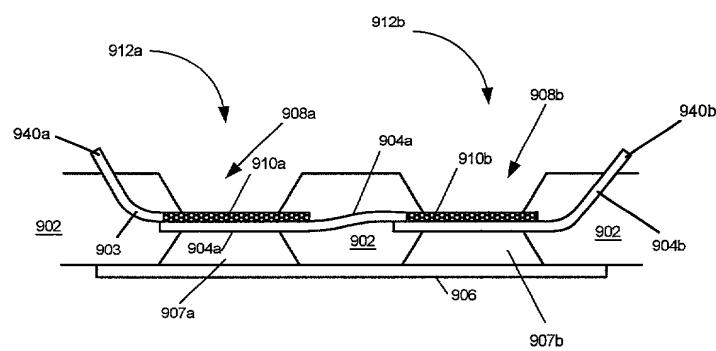
**FIGURE 6B**



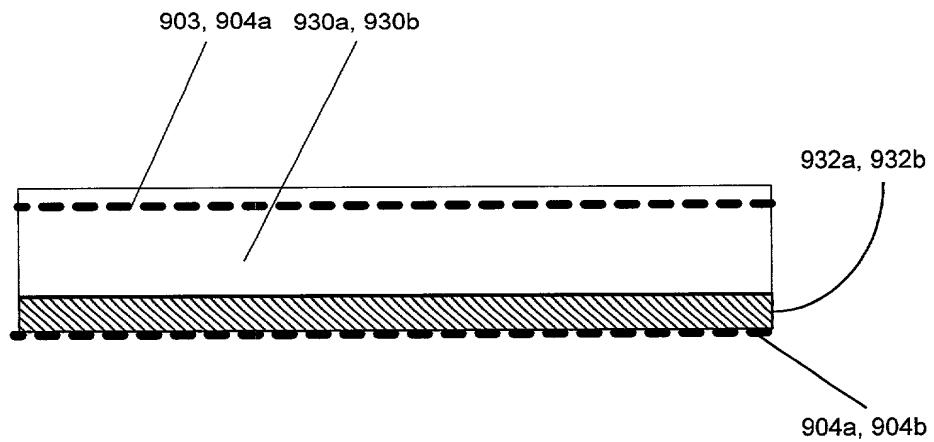
**FIGURE 7**



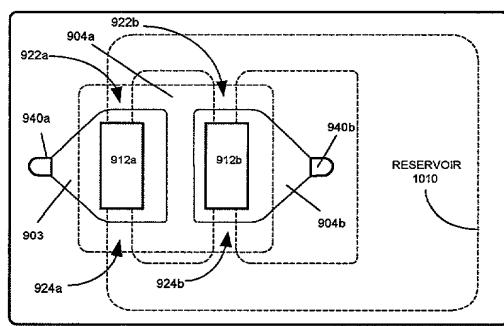
**FIGURE 8**



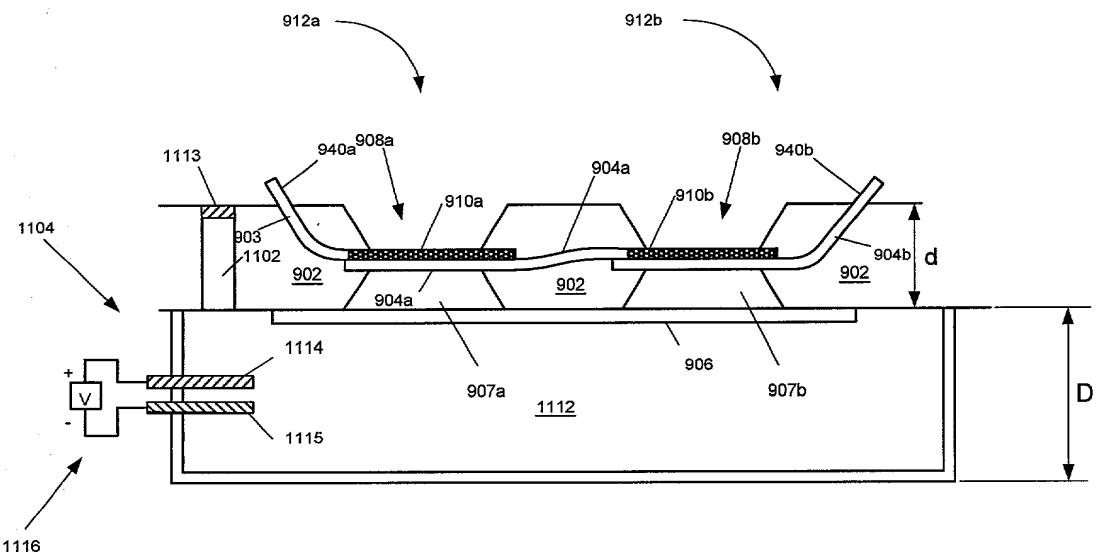
**FIGURE 9A**



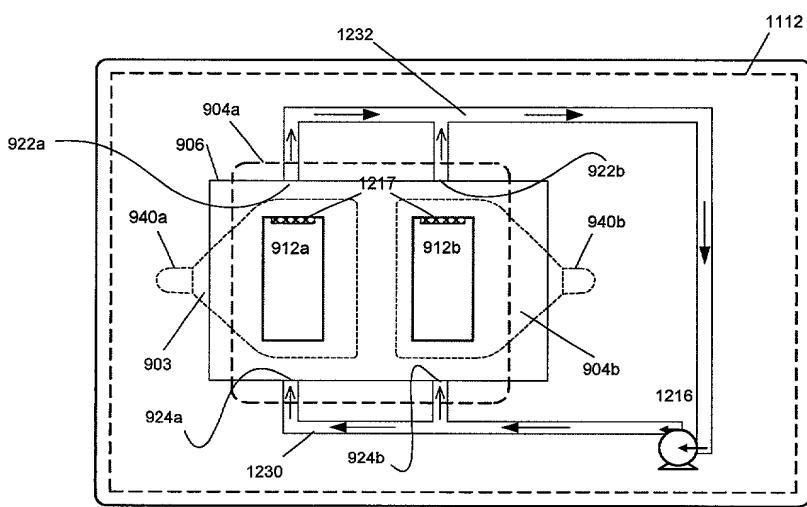
**FIGURE 9B**

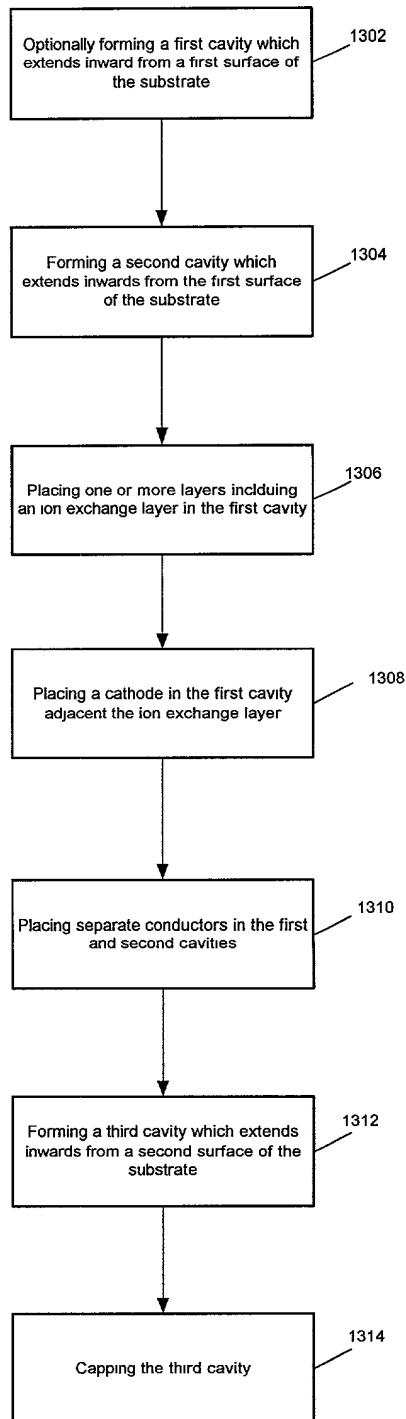


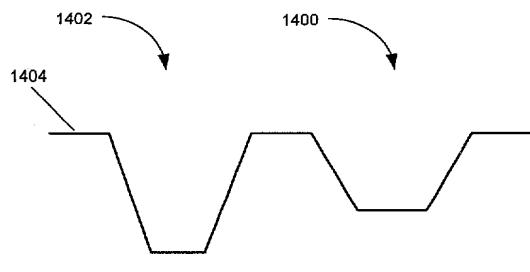
**FIGURE 10**



**FIGURE 11**

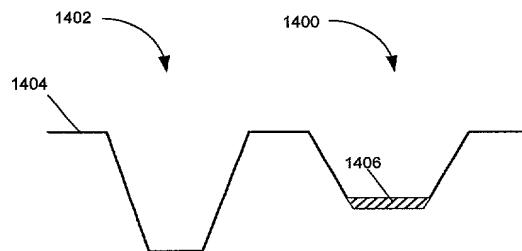
**FIGURE 12**

**FIGURE 13**



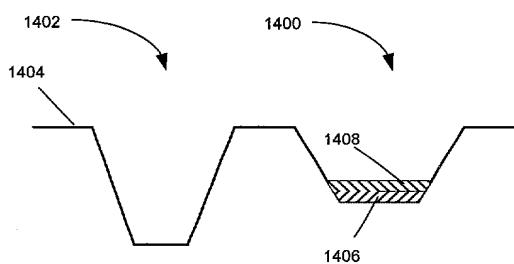
Step 1  
Form Cathode Well  
and Contact Well

**FIGURE 14A**

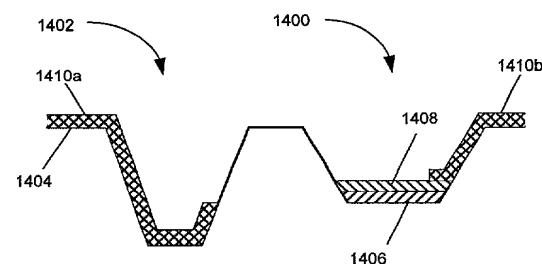


Step 2  
Deposit and Pattern Ion Exchange Layer  
(Hydrophilic Polymer)

**FIGURE 14B**



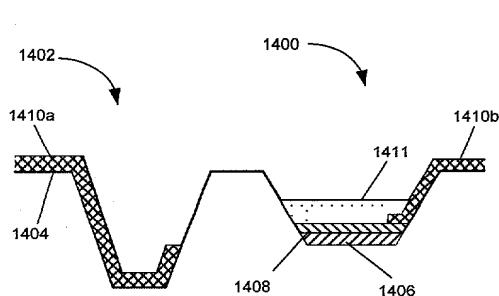
Step 3  
Deposit and Pattern Catalyst Layer  
(Catalyzed Carbon)



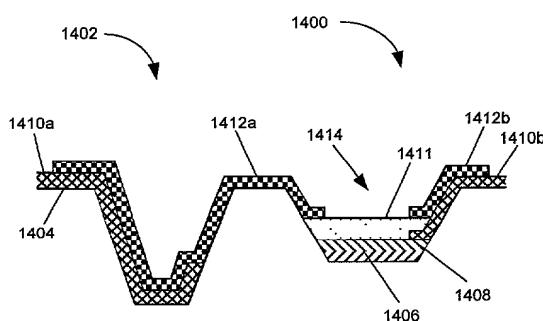
Step 4  
Deposit Metal Contact Layer

**FIGURE 14C**

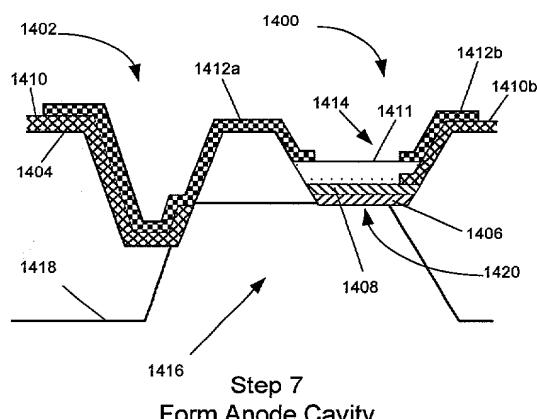
**FIGURE 14D**



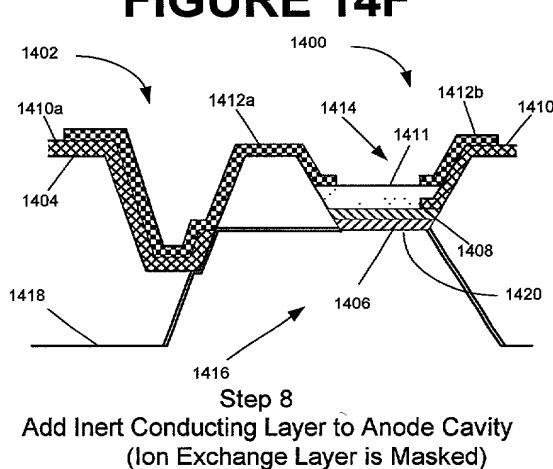
Step 5  
Deposit and Pattern Porous Backing Layer  
(Hydrophobic Polymer)



Step 6  
Deposit and Pattern Oxide (Insulator) Layer



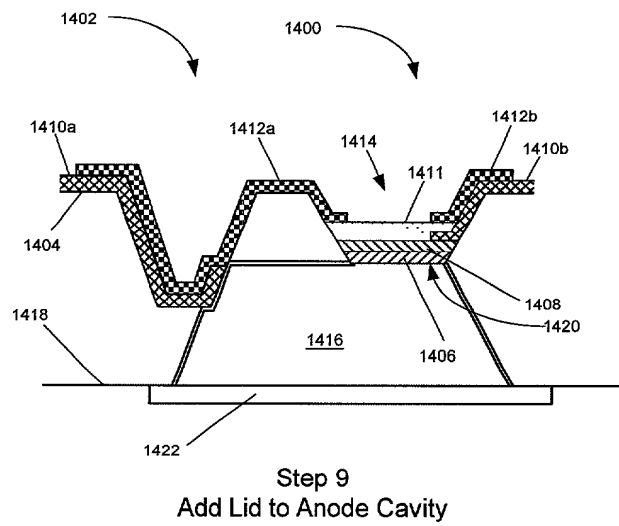
Step 7  
Form Anode Cavity



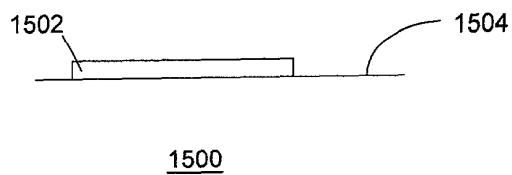
Step 8  
Add Inert Conducting Layer to Anode Cavity  
(Ion Exchange Layer is Masked)

FIGURE 14G

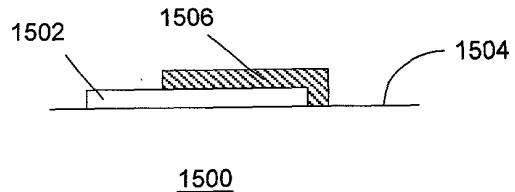
FIGURE 14H



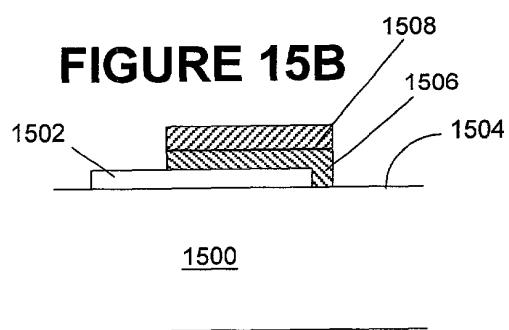
**FIGURE 14I**



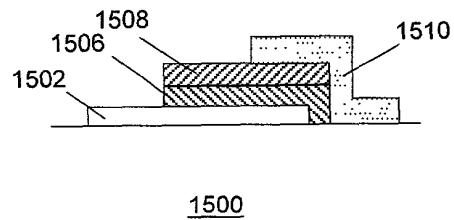
**FIGURE 15A**



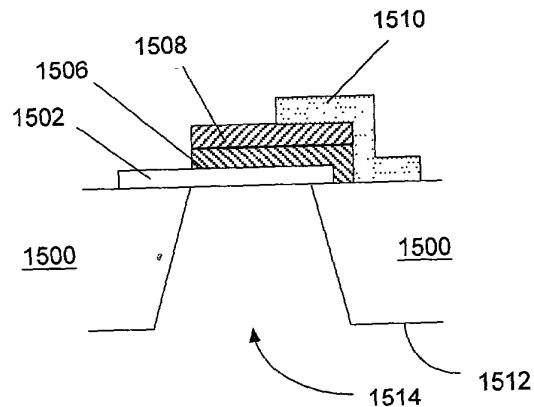
**FIGURE 15B**



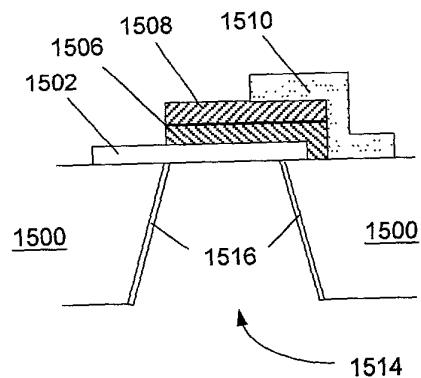
**FIGURE 15C**



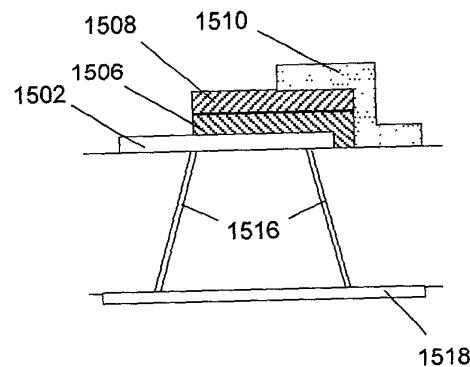
**FIGURE 15D**



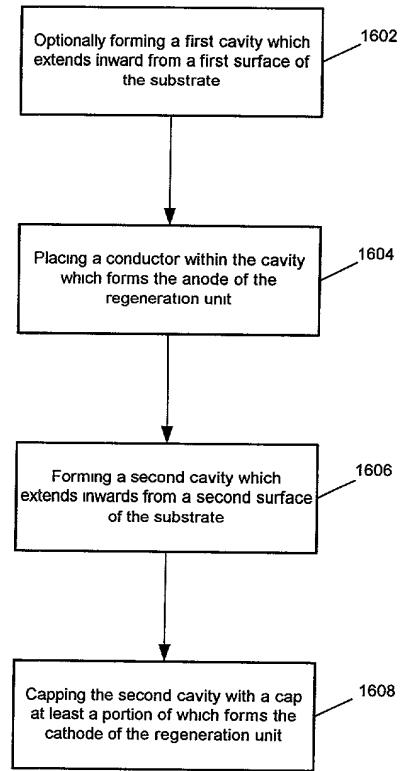
**FIGURE 15E**



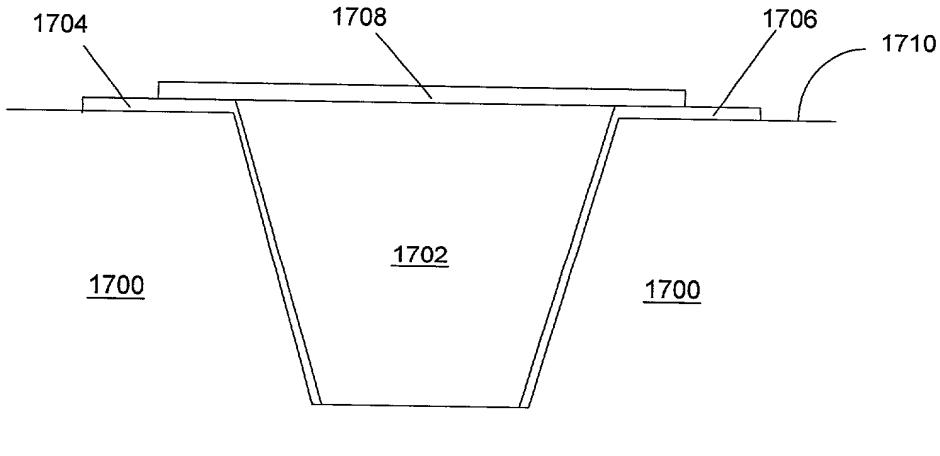
**FIGURE 15F**



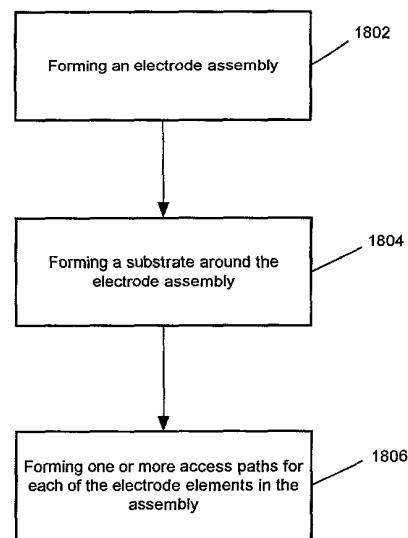
**FIGURE 15G**



**FIGURE 16**



**FIGURE 17**



**FIGURE 18**